

IN THE CLAIMS

1. (Currently amended) A rotary machine comprising a housing and a rotor received therein, characterized in that the inner surface of the housing is shaped by two intersecting cylinder parts having different diameters and parallel axes; the rotor received in the housing is coaxial with the smaller-diameter cylinder and has at least two segmental rotor parts mounting annular rotor covers and at least two pairs of annular elements connected in pairs and adapted to turn relative to the segmental rotor parts; the machine further comprises pivotal elements accommodated between the annular elements of each pair; a driving member, whose axis of rotation is coincident with the axis of the larger-diameter cylinder and which is received in the openings of the pivotal elements for movement therein to bring its working surfaces of said driving member, during rotation thereof, into contact with ~~the~~ inner working surfaces of the segmental rotor parts, rotor covers, and ~~the~~ an inner end-face and said cylindrical surfaces of the housing in order to define inner variable-volume working chambers between the segmental rotor parts and the driving member, and outer variable-volume working chambers between the driving member, the inner surfaces of the housing, and the outer surfaces of the rotor.

2. (Currently amended) A rotary machine as claimed in claim 1, characterized in that the pairs of annular elements are designed to move ~~over,~~ and engage in inner annular guides of the segmental rotor parts and engage with said segmental rotor parts.

3. (Currently amended) A rotary machine as claimed in claim 1, characterized in that the pairs of annular elements embrace the segmental rotor parts and are in contact with the inner cylindrical surface of the smaller-diameter housing part for movement in ~~and engagement~~

with the annular guides of the segmental rotor parts and engagement with said segmental rotor parts.

4. (Currently amended) A rotary machine as claimed in claim 1, characterized in that the pairs of annular elements embrace the segmental rotor parts and are in contact with the inner cylindrical surface of the smaller-diameter housing part for movement of annular elements in annular guides of one another and engagement with the segmental rotor parts.

5. (Original) A rotary machine as claimed in claim 3 or 4, characterized in that the pairs of annular elements embrace one another on two sides during movement relative to one another.

6. (Original) A rotary machine as claimed in any of claims 2, 3 or 4, characterized in that the pairs of annular elements are adapted to move in annular guides of the rotor covers.

Claims 7 and 8 (Cancelled)

9. (Original) A rotary machine as claimed in claim 1, characterized in that the openings of the pivotal elements have a shape complementary to the shape of the driving member and are adapted to slide therein.

10. (Currently amended) A rotary machine as claimed in claim 1, characterized in that the end-faces parts of the pivotal elements are provided at connecting points of the annular elements in rolling-contact bearings.

11. (Original) A rotary machine as claimed in claim 1, characterized in that the openings of the pivotal elements accommodate rolling-contact bearings for engaging the driving member.

12. (Currently amended) A rotary machine as claimed in claim 1, characterized in that the annular elements have reinforcing and cooling plates. ~~and the housing is provided with coolant passages.~~

13. (Original) A rotary machine as claimed in claim 1, characterized in that the driving member comprises a single plate or a plurality of interconnected plates and has a two-, three- or multi-lobed cross-section so that the lobes are received in the pivotal elements, the angles between the lobes are equal, and each segmental rotor part has a flat or two-sided surface, the angle between the lobes being equal to that between the sides to ensure contact between the driving member and the segmental rotor parts during rotation thereof.

14. (Currently amended) A rotary machine as claimed in claim ~~11~~ 13, characterized in that the driving member has parallel side faces and rounded short sides interacting with the inner cylindrical surface of the larger-diameter housing part.

15. (Currently amended) A rotary machine as claimed in claim 12 44, characterized in that the rounded short sides of the driving member have a radius of curvature larger than the distance from the center of rotation of the rotor to the pivotal elements.

Claims 16-26 (Cancelled)

27. (Currently amended) A rotary machine as claimed in claim 1, characterized in that the driving member of a rotary machine, comprising comprises a casing, wherein each part thereof of the casing between the an axis of rotation of the rotor and each of the working surfaces designed to be in contact with the inner cylindrical surface of the housing is provided with communicating inner chambers, ~~one~~ the first of which is a combustion working chamber and the ~~other~~ second chamber is designed to be filled with a working fluid for subsequently purging the first working chamber so that a fuel mixture ~~can be~~ is injected into it and the combustion products are discharged into ~~the~~ a main working chamber of the rotary machine.

28. (Currently amended) A rotary machine driving member as claimed in claim 14 ~~27~~, characterized in that it ~~the driving member~~ has passages and valves provided therein for transferring the working fluid to ~~the~~ a working chambers following compression thereof.

29 (Cancelled)

30. (Previously presented) A driving member as claimed in claim 27, characterized in that each of the combustion working chambers has double walls.